Using GIS to Move Salisbury from Good to Great

Strategic Plan Update

December 2006

Technical Assistance Provided By:

Garry V. Cooper Associates
127 Sports Club Lane, #132
Boone, NC 28607
Tel: 828.262.7051 (office), 828.264.0708
E-mail: garry@cooperwww.com

Using GIS to Move Salisbury from Good to Great … Strategic Plan Update

Executive Summary

Purpose

The City of Salisbury conducted a workshop on December 15, 2006 to update its GIS strategic plan. The scope of work included validation of the vision components, review (and celebration) of accomplishments, and an update of the project listings.

Participants

Workshop participants consisted of city and county staff. A total of 24 people participated in the workshop.

Workshop Framework

Participants in 2004 identified 12 projects to accomplish over a 5-year time period. The 2006 workshop allowed participants to reflect about what in 2004 they *said* they would accomplish, what they actually *did* accomplish, how conditions have *changed*, and the need to *adjust* both projects and the plan.

Process

Participants used a 7-step process: 1-validation of vision components; 2-review of project listing; 3-identification of what has changed; 4-determination of the vital signs that the initial plan is still healthy; 5-deciding where the city should place special emphasis over the next two years; 6-action planning; and 7-time for reflection.

Results

Participants accomplished several action planning tasks. First, they reviewed the status of the 12 initial GIS projects in the 2004 plan (the city has completed 4 of the 12 initial GIS projects, 7 are in-progress of completion, and the city deferred one project). Participants also reviewed/updated the *GIS Data Layer Inventory* listing that is the heart of the city-wide GIS data base (they identified which of the *existing* layers require updating, prioritized layers that have a *new* status on the listing, and both identified and prioritized additional *new layers* that are not on the listing). Lastly, participants identified 41 *new projects* to add to the GIS plan (grouped by vision component, prioritized, and linked to council-level goals and outcomes).

The GIS plan for Salisbury is a success story, and there are several lessons to be learned from it. These lessons involve the importance of crossing departmental/organizational lines, becoming familiar with technical terminology and potential GIS applications, understanding that GIS project development in Salisbury is becoming a fast-moving train, recognizing the need to have both the right mix of projects *and* projects that bring all GIS users equitably on board the GIS train, and understanding what powers the GIS train.

In short, the GIS flower (planted in 2004) has started to bloom in Salisbury.

The City of Salisbury conducted a workshop on December 15, 2006 to update its 2004-2010 GIS strategic plan. The scope of work included validation of the vision components, review (and celebration) of accomplishments, and an update of the project listings. This report documents both the process and the results. The following report sections identify the participants and describe the workshop framework, specific action planning steps (to include accomplishments and project updates), the meaning and significance of success, and future directions.

The Participants

Workshop participants consisted of city and county staff. A total of 24 people participated in the workshops (Figure 1).

Workshop Framework

Participants in 2004 identified 12 projects to accomplish over a 5-year time period. The 2006 workshop allowed participants to reflect about what in 2004 they *said* they would accomplish, what they actually *did* accomplish, how conditions have *changed*, and the need to *adjust* both projects and the plan. In short, this workshop was an opportunity to track – or follow up on – strategic GIS directions for the city, share information across departmental lines, and redirect activities in a coordinated, proactive manner.

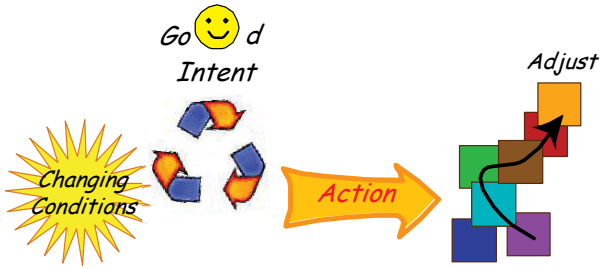

Figure 1. Workshop Participants

Name	*Representing*
• Kelly Baker	Administration
• Marshall Moore	Fire
• Bob Parnell	Fire
• Doug Stevens	Fire
• Kathryn Clifton	Land Management and Development
• Janet Gapen	Land Management and Development
• Dan Mikkelson	Land Management and Development
• Craig Powers	Land Management and Development
• Wendy Spry	Land Management and Development
• Benita Staples	Land Management and Development
• Lynn Raker	Land Management and Development
• Jerry Hogan	Management Services
• Vickie Eddleman	Public Services
• Mark Martin	Public Services
• Stephen Brown	Parks and Recreation
• Elaney Hasslemann	Parks and Recreation
• Gail Elder White	Parks and Recreation
• Diane Gonzales	Police
• Adrian Rollans	Rowan County
• Angela Hedrick	Salisbury CDC
• Trey Cleaton	Salisbury-Rowan Utilities
• Jeff Jones	Salisbury-Rowan Utilities
• Patrick Kennerly	Salisbury-Rowan Utilities
• Mike West	Salisbury-Rowan Utilities

Specific Action Planning Steps and Accomplishments

Below are the seven action planning steps that participants used to update the GIS strategic plan. Step 2 includes summary information about project accomplishments.

Step 1 – Validate vision components

Planning usually begins with a vision statement … where one wants to be at some point in the future. Plan formulation and implementation then determine how one can realize the vision. The 2004 GIS strategic plan identifies four vision components that need to happen in the GIS arena: 1-collect, maintain, and display data; 2-utilize data analysis/modeling to make better decisions; 3-provide necessary resources; and 4-implement GIS-based work order system. Participants confirmed that *the 2004 vision continues to be a valid statement of where they want to be in 2010*.

Step 2 – Review project listing

Realizing the vision *initially* involved 12 specific projects. Workshop participants reviewed each of these projects and addressed several questions: is the project on track … how has the situation changed … what are the blocks/obstacles to moving forward … what can be done to remove the blocks/obstacles … and how should the city adjust/re-maneuver? Below are summary comments relating to review of the 12 projects included in the 2004 plan.

1. Complete infrastructure mapping – ahead of schedule; sewer mapping is done; water mapping is nearly done; *NPDES state mandate* to accomplish storm water mapping is without state funding; the city must work on the high priority projects first, and departments must *weigh* the different priorities to determine mapping sequence.
2. Data layer maintenance/display – the city has moved to an *enterprise solution*, and the catalogue portion of the project has been delayed; migration of data to SDE has created *multiple data editors*; change in software will require educating users as they adjust to the change; the end result will be greater efficiencies and will require less work in the future because updating will be from one central server.
3. Analyze costs/benefits for potential annexations – completed project (however, future annexations will continue to create *new* project requirements).

4. Identify economic development areas – completed project (however, will need to make changes to urban progress zones).

5. Utilize county-wide data in police dispatch (i.e., integration of database) – city and county continue to seek agreement on using *common solutions* and adding *additional cities* as participants; the city-county fringe areas are problematic locations regarding data integration and will require standardization of data structure; integration and standardization of data entry (using common tools) will require additional work.
6. Utilize real-time tracking of police units – project *deferred* because of budget considerations.
7. Modeling, scenario analysis, and incident review and evaluation – utilities applications are on-track; new EPA rules require

enhanced modeling; purchase of a larger site license, making data available, and funding are all necessary to keep this project moving.

8. Allow for efficient maintenance of utility systems – project is on-track; the city will soon implement *pipe survey software* that will integrate with GIS and additionally provide *mobile capability;* fiscal realities limit pace of implementation; the city has already realized cost savings, and this is a good example of how GIS can improve efficiencies *and* also save money.
9. Implement existing work order procedures with GIS-based (Customer Resource Management [CRM]) system – although this project is on-track, the method of accomplishment is changing from a GIS-driven to a *GIS-integrated/compatible* system; staff is awaiting council approval, and departments need to continue unified support and demonstrate the value of this project.
10. Provide for mobile GIS access – work has begun, but progress is slow because of difficulty in accessing staff resource time; utilities has started using mobile internet connections for meter reading; the next generation ArcGIS server will facilitate this project, but this will require additional funding.
11. Add GIS staff, and budget more money – completed project (addition of one staff position); however, project funding will continue to be an issue, and an additional position will likely be necessary to accomplish the growing list of new projects.

12. Make data access easy (i.e., user-friendly), and make more information available on-line – completed project; a concern is that with increased data availability comes the need for increased security; in addition, the demand for *new data layers* will continue to increase.

Step 3 – What else has changed?

Both internal and external changes can impact project accomplishment. Although the city has little or no control over most external changes, it usually has significant control over internal changes. However, many internal changes involve resource competition. Figure 2 is a listing of changing conditions that impact GIS needs and service delivery.

Figure 2. Changing Conditions

- City growth (e.g., demographics … annexations … service requirements)
- Greater appreciation of GIS as a management and customer service tool (among city management and staff personnel)
- Council-level goals/outcomes are dynamic
- Increased focus on customer service base (both internal-directed and external-directed requirements)
- Legal requirement for handling/storing data
- Staff changes (additions, retirements, promotions, etc.)
- Technology
- Traffic patterns/road networks

Step 4 – What are the vital signs that the initial plan is still healthy?

It's important to monitor the vital signs of any plan. Figure 3 is a listing of the vital signs showing that the plan initially developed in 2004 *is* still healthy.

Figure 3. Plan Vital Signs

- City management support
- Greater/increased awareness about GIS
- More data *and* more people using it
- Movement to *enterprise solution* concept
- Positive comments from private sector users
- Continuing to make progress … substantiates relevance

Step 5 – Where should the city place special emphasis over the next two years?

One can identify for any plan areas of emphasis that *must* be done if the plan is to remain healthy. Figure 4 lists areas of emphasis that are critical to keeping the GIS plan on track.

Figure 4. Areas of Emphasis

- Communication–coordination–training involving departments/users is critical
- Continue data development/collection
- Continue to make data accessible and easy to use
- Continue using data for enhanced planning and decision-making
- More entry-level training/information access
- Standardize *business practices* (to facilitate integration with CRM)

Step 6 – Action Planning

The action planning step of the workshop consisted of three components. First, participants reviewed/updated the *GIS Data Layer Inventory* listing (projects 2 and 12 of the initial 12 projects in the plan have direct linkages to this inventory listing); second, participants asked staff to update the schedule and task sequencing for the eight projects in the initial plan that are still in-progress; and third, participants identified new projects, asked that staff coordinate scheduling and action planning task development with the appropriate city departments, and add these projects to the plan.

The GIS staff maintains the *GIS Data Layer Inventory* listing. Participants identified which of the *existing* layers require updating (Figure 5); they prioritized layers on the listing that have a *new* status (Figure 6); and they both identified and prioritized additional new layers that are not on the listing (Figure 7). In regard to prioritization, an **A** priority layer is higher than a **B** priority layer.

Figure 5. Existing Layers Requiring Updating

Description	*Classification*
• Storm drainage	Infrastructure
• Elevation point data	LIDAR
• Greenway trail	Open Space
• Parks	Open Space
• Planning neighborhoods	Planning
• Street centerline, address ranges, and thoroughfare designation	Transportation

There was insufficient workshop time for the participants to update projects in the initial plan that are still in-progress. Therefore, the GIS staff agreed to accomplish this task, and the updated project listing is at Appendix A.

Participants additionally identified 41 *new projects* to add to the GIS plan, and they grouped the projects by vision component.

Figure 6. Prioritization of *New* Layers Already on the Listing

Description	*Classification*	*Priority*
• Residential subdivisions	Boundary	A
• Abandoned buildings	Fire	A
• Impervious surfaces	Infrastructure	A
• Bicycle routes	Transportation	A
• Bus routes	Transportation	A
• Bus shelters/ stops	Transportation	A
• Pedestrian access	Transportation	A
• Sidewalks	Transportation	A
• Traffic volumes	Transportation	B
• Grease traps	Utilities	B
• Meters	Utilities	B
• Significant industrial users	Utilities	B

Because of the large number of new projects, participants prioritized the projects as either an **A** project (higher priority) or a **B** project (lower priority). Figure 8 is a listing of *both* the **A**-priority and **B**-priority projects (grouped by vision component), and Appendix B contains detailed information – by project and also grouped by vision component – about scheduling and task development for all of the **A**-priority projects.

All of the work order-related projects (CRM) listed in both Figure 8 and Appendix B have interface, work flow, mapping, and reporting requirements (most of which are incident-driven). In addition, no tasks have been identified for these work order-related projects (in Appendix B) because determination of tasks is a function of the software, and the city has not yet purchased the software. Lastly, the projects listed in Appendix B (and also **A**-priority projects in Figure 8) are in priority order within each vision component; for example, the first project in each vision component is the highest priority project within the component.

Figure 7. Prioritized Listing of *New* Layers *Not* on the Listing

Description	*Classification*	*Priority*
• Storm drain lines … and improve storm drain layer	Infrastructure	A
• Greenway point markings	Open Space	A
• Buildings with alarm systems	Places	A
• Opticom intersections	Transportation	A
• Traffic speed data (speed limits and actual travel speeds)	Transportation	A
• Backflow prevention devices/RPZ	Utilities	A
• Cable/wireless coverage areas	Utilities	A
• Fire department connections	Utilities	A
• Private underground power–gas–cable–phone	Utilities	A
• Social and demographic data by block group	Census	B
• Buildings with sprinkler systems	Fire	B
• Knox box locations	Fire	B
• Drainage catchment areas	Hydro	B
• Railroad crossing photos (markings–signs–signals)	Infrastructure	B
• Traffic signals	Infrastructure	B
• Geo-reference usage of park amenities (structure)	Open Space	B
• Park amenities (physical location)	Open Space	B
• Street trees	Open Space	B
• Trees 18" and larger	Open Space	B
• Foster homes	Places	B
• Photographic inventory of historic homes	Places	B
• Residential group homes	Places	B
• Confined space locations	Risk Management	B
• Hazardous materials locations	Risk Management	B

Figure 8. *New* Projects

A-priority	B-priority
Collect, Maintain, and Display Data 1. Implement *Addresser* Program 2. Map all remaining fire hydrants county-wide 3. Develop a storm-water system map 4. Purchase oblique aerial photography to integrate into current applications *Utilize Data Analysis/Modeling to Make Better Decisions* 5. Participate in census address review 6. Standardize addresses county-wide with input from city/county /911; create routing layer county-wide 7. Incident mapping (i.e., crime mapping) 8. Develop a county-wide water and sewer service plan 9. Use network analysis for improved routing for public services *Provide Necessary Resources* 10. Wireless access city-wide 11. Support fire accreditation and standardization of coverage 12. Develop on-line application to highlight economic development areas and urban progress zone *Implement GIS-based Work Order System* 13. Automatic notification to perform map updates within workflow 14. Mobile access required 15. Produce end-of-year reports for performance measurement 16. Pull up history of activity for address/parcel 17. Start work order with either map or database – both equal	*Collect, Maintain, and Display Data* 18. Collect and monitor data on at-risk (i.e., deteriorated) housing … prioritize need for mitigation 19. Develop county-wide stream centerline layer 20. Develop impervious surface layer 21. Model land use change 22. Participate in Project Greenmap to identify *green areas* that will benefit planning, consumers, constituents, and tourists 23. Track vehicle accidents 24. Use 3-D visualization during presentation *Utilize Data Analysis/Modeling to Make Better Decisions* 25. Compare night incident vehicle accidents with street light map 26. Determine need for bike trails/walking trails based on locations with high auto versus pedestrian incidents 27. Develop park usage/new locations based on population 28. Identify homes with lead pipes (water quality … grant available) 29. Identify non-driving households for evacuation planning 30. Track new construction (where zoning permits have been issued) 31. Use *CityGREEN* software to monitor change in tree canopy … are we meeting goals for tree canopy? 32. Utilize water distribution system data to analyze water quality throughout the system *Provide Necessary Resources* 33. City-wide security cameras 34. Develop on-line application for park amenities and alternate transportation 35. Facilities management graphic representation of buildings 36. Fiber to the home *Implement GIS-based Work Order System* 37. Generate reports on system performance based on work orders 38. Map drainage problems (based on citizen complaints) 39. Respond to availability of water and sewer connections 40. Transform code enforcement's current operation to GIS-based

	41. Utilize/track automatic billing/map service requests

Step 7 – Reflection

Participants reflected on both the process and their accomplishments at the end of the workshop. The entire process was bottom-up and participant-driven. The easiest parts of the workshop were Steps 1-5, and the hardest part was Step 6. There were also feelings of pride when looking at the accomplishments. Additionally, participants recognized – and valued – their commitment to work together toward realizing the guiding values (identified during the initial plan development). In addition, the time spent working together both helped to build teamwork and better position the city as it grows and changes over the next several years.

Meaning and Significance of Success

The GIS plan for Salisbury is a success story, and there are several lessons to be learned from it.

First, GIS crosses all departmental/organizational lines and intersects functionally in a variety of ways between departments. GIS applications often involve complex procedures, and continued inter-departmental dialogue regarding applications is essential.

Second, both GIS applications and terminology are generally technical. Because most decision-makers are often not familiar with either GIS terminology or application details, it is critical that staff keep decision-makers informed and advertise success stories in ways that all can understand.

Third, GIS project development in Salisbury has become a fast-moving train. What started out as 12 projects is now 41 and will continue to exponentially grow over the next several years. This has significant policy and financial implications that, if recognized and methodically addressed now, will become less overwhelming in the future.

Fourth, in addition to cost considerations, it is important to have both the right mix of projects *and* projects that bring all GIS users equitably on board the GIS train. The various GIS projects range widely in terms of cost. The greater the number of projects and the greater the departmental linkages, the greater the potential efficiencies, and it is more likely that the city can realize economies of scale.

Fifth, GIS is a tool (versus an end). Although applications are boundless, the fuel that should power the GIS train must be efficiencies, cost savings, and improved customer service.

Future Directions

Success stories deserve to be shared with others. The sharing can include the community level (i.e., with the citizens of Salisbury) and also the professional level (i.e., with management, between departments, and among peers). The Chinese annually celebrate a specific animal (e.g., Year of the Dog). One can do the same with GIS … celebrating the *Year of GIS*. With prudent project selection and adequate funding the city should, in 1-2 years, be able to focus on how GIS governmental services are helping both citizens and businesses in Salisbury … and how the Salisbury team connects with key players even outside the city. In addition, management and staff can advertise their success story among peers at conferences.

In short, the GIS flower (planted in 2004) has started to bloom in Salisbury. The spreading roots and future growth will continue to involve commitment of management, staff, and elected officials … all working together to help move Salisbury from *good to great*.

Appendices

A – Updated Listing of Initial Projects

B – FY 2004-05 Council-level Outcomes and Goals

C – New Projects Added to the Initial Listing

D – FY 2006-07 Council-level Outcomes and Goals

Appendix A – Updated Listing of Initial Projects

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*					*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 05-06	*FY 06-07*	*FY 07-08*	*FY 08-09*	*FY 09-10*		
Collect, maintain, and display data								
1 – IN PROGRESS Complete infrastructure mapping $375,000	Meet with departments to identify attributes to be collected	• Prioritize data collection needs • Purchase needed materials • Hire additional data collectors • Begin data collection (20 percent of identified layers)	• Data collection completed for 40 percent of layers	• Data collection completed for 60 percent of layers	• Data collection completed for 80 percent of layers	• Data collection completed for 100 percent of layers	Each department has usable data and is ready to enter maintenance cycle	High 1, 2, 3, 5, 6, 9, 10, 11, 12, 13, and 14
2 – IN PROGRESS Data layer maintenance and display (create data catalog, continue to improve existing data, implement custom tools for data maintenance, and develop searchable data catalog) $130,000	Meet to inventory and catalog data layers	• Identify needed tools for maintenance • Develop data schematic	• Identify custom tools for data maintenance • Complete metadata	• Document management link to GIS (LaserFiche) • Complete a searchable data and image catalog			All end users have access to city data layers	High 1, 2, 3, 4, 5, 6, 7, 9, 13, and 14

Appendix A – Updated Listing of Initial Projects

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*					*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 05-06	*FY 06-07*	*FY 07-08*	*FY 08-09*	*FY 09-10*		
Utilize data analysis/modeling to make better decisions								
3 – COMPLETED Analyze costs/benefits for potential annexations In-house	Joint meeting involving LMD, SRU, and Management Services to develop analysis methods	• Identify target annexation areas • Identify applicable data layers • Apply analysis methods using GIS software					Development of cost/benefit procedural guide and increased tax base for city	Medium 2
4 – COMPLETED Identify economic development areas In-house	Joint meeting involving LMD, SRU, and EDC to exchange information	• Develop criteria for modeling specific sites • Obtain additional data (if needed) • Use GIS to characterize sites • Document information about sites					Identified areas and catalogued information available to decision-makers	Medium 2 and 14
5 – IN PROGRESS Utilize county-wide data in police dispatch In-house	Joint meeting involving police and LMD to identify data requirements and procedures		• LMD coordinates data requirements with county • LMD provides access to data and informs police of new access procedures				Police use county data to determine location for dispatch	Medium 1

Appendix A – Updated Listing of Initial Projects

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*					*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 05-06	*FY 06-07*	*FY 07-08*	*FY 08-09*	*FY 09-10*		
Utilize data analysis/modeling to make better decisions								
6 – IN PROGRESS Utilize real-time GPS tracking of police units $150,000	Joint meeting involving police, IT, and LMD to explore possibilities		• Investigate GPS technology options • Identify funding and budget sources	• Purchase and install hardware and software (phased) • Training and implementation 25 percent complete	• Training and implementation 75 percent complete	• Training and implementation 100 percent complete	Improved tracking, deployment, and response times	Medium 1
7 – IN PROGRESS Modeling, scenario analysis, and incident review and evaluation $150,000	Joint meeting involving LMD and SRU to develop a sewer and water project	• Collect sewer data	• Purchase and implement sewer modeling software	• Collect water data	• Implement hydraulic model utilizing complete data	• Perform maintenance and upgrades, as needed	Prepare summary report evaluating model functionality and results	Medium 13
8 – IN PROGRESS Allow for more efficient maintenance of utility systems In-house	Stakeholder meeting to assess on-going activities	• Collect sewer data • Prepare and distribute system maps	• Collect water data • Prepare and distribute system maps	• Allow/support real-time data access (especially mobile data)			SRU, LMD, and public services celebrate accomplishment	Medium 13

Appendix A – Updated Listing of Initial Projects

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*					*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 05-06	*FY 06-07*	*FY 07-08*	*FY 08-09*	*FY 09-10*		
Implement GIS-based work order system								
9 – IN PROGRESS Integrate existing procedures with future system $1,500,000	Consultant prepares work order framework	• Conduct departmental and cross-functional planning/needs assessment • Evaluate results • Prepare RFP	• Purchase system	• Test and implement system			All departments are satisfied with new system	High 9
Provide necessary resources								
10 – IN PROGRESS Provide for mobile GIS access $150,000	Form stakeholder group to evaluate results		• Seek funding (to include grants)	• Seek funding (to include grants)	• Hire consultant • Evaluate/select implementation method	• Purchase and roll out system	Successful test of wireless broadcast	High 1, 9, and 13
11 – ON TARGET Add GIS staff, and budget more money	City council adopts GIS action plan	• Hire GIS technician			• Hire GIS programmer		Send thank you note to City Manager and Council	High 1, 2, 3, 4, 6, 7, 9, 10, 11, 13, and 14
12 – ON TARGET Make data access easy (i.e., user-friendly), and make more information available on-line	Discuss on-line applications and ease-of-use at GIS user group meeting	• Develop use policies • Prioritize project listing		• Develop on-line applications • Provide for download of data layers	• Roll out/make available at public kiosk		Survey users regarding applications and ease of use	High 12, 13, and 14

Appendix B – FY 2004-05 Council-level Outcomes and Goals

City of Salisbury

City Council Outcomes and Goals, FY 2004-05

(Revised and Adopted February 20, 2004)

Outcome 1: Improve neighborhoods and safety for all areas of the City

1. Prepare a second five-year Police Department Strategic Plan – Police
2. Implement Crime Control Plan – Police
3. Maintain implementation of Project Safe Neighborhood – Police
4. Evaluate an alarm ordinance – Police, Fire
5. Broker projects to improve housing in selected neighborhoods – LM&D
6. Provide leadership training for the Jersey City neighborhood – LM&D
7. Conduct needs assessment to identify additional selected neighborhood(s) – LM&D
8. Complete Oakdale-Union Hill Cemetery Improvements – LM&D, Public Services
9. Evaluate Public announcement methods concerning emergency preparedness – Fire, Police, Utilities
10. Evaluate cost of adding an additional Fire substation – City Manager, Finance, Fire
11. Evaluate consolidating Fire Department dispatch with Police dispatch – Fire, Police, Information Technology

Outcome 2: Expand the tax base and revenue sources

1. Prepare systematic annexation plan – LM&D, Finance, Utilities
2. Publicly support Project Development Financing – City Council, Management Team
3. Identify and promote properties within the City for future in-fill development – LM&D

Outcome 3: Provide quality Parks and Recreation services

1. Continue development of Salisbury Community Park and Athletic Complex – Parks & Rec
2. Develop additional funding sources for the Community Park – Parks & Rec
3. Continue renovation of existing parks and recreation facilities – Parks & Rec
4. Complete master plans for individual parks – Parks & Rec
5. Implement Greenway Construction – LM&D, Parks & Rec
6. Implement Open Space Standards through Vision 2020 – LM&D, Parks & Rec
7. Conduct Feasibility Study for Civic/Convention Center – City Council, Management Team, Parks & Rec, appointed Task Force

Appendix B – FY 2004-05 Council-level Outcomes and Goals

Outcome 4: Improve appearance and function of the Innes Street Corridor

1. Prepare East Innes Street streetscape plan – LM&D

Outcome 5: Implement Salisbury Vision 2020 Plan

1. Adopt standards and ordinances that support implementation of Vision 2020 – LM&D, Management Team
2. Identify opportunities to support Vision 2020 through City operations – LM&D, Management Team
3. Consider smart growth standards and incentives – LM&D, Utilities

Outcome 6: Foster a climate of City-County cooperation

1. Support Rowan County's development of a land-use plan with growth corridors – LM&D, Utilities
2. Conduct periodic City-County meetings with elected officials as needed – City Council

Outcome 7: Attract, retain and develop high quality City employees

1. Require multiculturalism training for all new employees, and provide training for interested citizens – Human Resources
2. Implement employee training and development plan – Human Resources
3. Evaluate "Broad Banding" compensation program for additional departments – Human Resources
4. Implement strategies to recruit employees from diverse populations – Human Resources
5. Develop strategies to attract and retain quality employees – Human Resources

Outcome 8: Partner with Rowan-Salisbury Schools

1. Meet with School officials to determine needs with which the City can assist – City Council, Management Team

Outcome 9: Improve overall management of City and departments

1. Participate in statewide programs to establish performance standards – Finance, Management Team
2. Develop system of standards to measure performance and accomplishments for all City departments – Finance, Management Team
3. Monitor accomplishments in achieving stated standards – Finance, Management Team
4. Create, monitor, and evaluate departmental strategic plans – City Manager, Management Team
5. Periodically evaluate the status of the City's Outcomes and Goals – City Council, City Manager, Management Team
6. Continue the City's Goal Setting and Future Directions process – City Council, City Manager, Management Team

7. Offer American Public Value Leadership training for City Council, Management Team, and other local elected officials and staff – City Council, City Manager, Human Resources
8. Council to review election methods with the Institute of Government – City Council

Outcome 10: Implement special initiatives to improve the quality of life for Salisbury citizens

1. Participate in the Regional Environmental Sustainability Project – City Council, LM&D, Management Team
2. Provide appropriate training for all boards and commissions – LM&D, Human Resources, Parks & Rec
3. Complete a feasibility study for an educational television access channel – Information Tech
4. Evaluate the need for a policy for the development of affordable housing in Salisbury – LM&D, Utilities

Outcome 11: Improve and enhance Downtown Salisbury

1. Partner with DSI to implement the Downtown Salisbury Master Plan – LM&D
2. Implement recommendations of DSI Parking Committee – LM&D, Public Services
3. Conduct a downtown ADA compliance audit – LM&D, Human Resources, Public Services

Outcome 12: Streamline development review process and ordinances

1. Continue development of project tracking software – Utilities, LM&D, Information Technology
2. Establish "one stop permitting" – LM&D, Utilities
3. Review construction standards – LM&D, Utilities
4. Seek local permitting authority for utility extensions – Utilities, LM&D
5. Salisbury-Rowan Utilities to update and enforce existing State-mandated plans and programs (necessary to achieve local permit authority) – Utilities, LM&D

Outcome 13: Provide quality water and wastewater services to Rowan County that protect the environment, promote public health, improve the quality of life, support planned growth, and maintain public trust

1. Operations – Utilize resources to effectively and efficiently maintain and operate existing and future equipment, infrastructure, and processes, while providing superior quality water and wastewater services and protecting public health and the environment – Utilities, Finance
2. Rates/Revenue – Manage the utilities in a manner that optimizes the utilization of resources and enables Salisbury-Rowan Utilities to charge competitive and affordable rates, while providing for capital and operational needs – Utilities, Finance
3. Customer Service - Provide accessible and responsive services and address customer needs efficiently and accurately – Utilities, Finance

4. Human Resources – Attract, retain, and reward a team of qualified employees committed to the Salisbury-Rowan Utilities' mission – Utilities, Human Resources
5. Stakeholder Communications – Be proactive in providing information, education, and public communication services – Utilities
6. Planning and Community-Wide Development – Operate Salisbury-Rowan Utilities according to well-defined plans supportive of the strategic plans of client communities – Utilities

Outcome 14: Create a positive business climate in Salisbury and Rowan County

1. Explore the feasibility of creating a business incubator for Salisbury – LM&D, Management Team, selected Development Organizations
2. Evaluate the need and options for business and development incentives – Utilities, LM&D, Management Team, selected Development Organizations
3. Serve as a catalyst to develop a consolidated strategic business initiative for Rowan County – City Council, Management Team, LM&D, Rowan County, selected Development Organizations
4. Evaluate City-County consolidation of the development review process – City Council, City Manager, LM&D, Utilities, Rowan County
5. Investigate entrepreneurial loan pool and funding options – City Manager, LM&D, selected Development Organizations, Financial Institutions
6. Downtown Salisbury to take inventory of types of businesses that are of interest to young people and make recommendation – Downtown Salisbury
7. Foster a customer service attitude among all City workers – City Manager, Finance, Management Team
8. Establish a downtown Farmers Market – City Council, LM&D, City Manager, Public Services, Downtown Salisbury, NC Cooperative Extension

Appendix C – New Projects Added to the Initial Listing

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*				*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 06-07	*FY 07-08*	*FY 08-09*	*FY 09-10*		
Collect, maintain, and display data							
1 – Implement *Addresser* Program $5,000 – 10,000	Meet with Rowan County to identify and agree upon addressing service areas	• Review addressing and street centerline data schema and field match to schema used by *The Addresser*	• Purchase, install and test *Addresser* extension for ArcGIS • Develop automated model for extracting data and sharing with county • Use improved address data for 2010 Census update			Successful implementation of *Addresser* extension for all editors of address and street center-line data	High 1
2 – Map all remaining fire hydrants county-wide In-house	Meet with Rowan County to review existing data	• Review hydrants data schema and compare with that of SRU • Contact neighboring jurisdictions for data availability	• Provide field assistance in collecting data			Successful collection of remaining hydrants in Rowan County	High 11
3 – Develop a storm-water system map In-house	Conduct meeting with LMD, Public Services, and SRU staff to identify data layers needed for comprehensive storm-water system map	• Hire additional data collectors (interns) • Begin data collection (10 percent of area)	• Data collection completed for 30 percent of area	• Data collection completed for 50 percent of area	• Data collection completed for 70 percent of area	Storm-water system infrastructure is mapped and available to all departments and is ready to enter maintenance cycle	High (state mandate)
4 – Purchase oblique aerial photography to integrate into current applications $50,000	Conduct meeting with Fire, Police and other interested staff to identify coverage area desired for oblique imagery			• Contract to have oblique imagery flown		Oblique imagery available to all departments and is ready to enter maintenance cycle	High 1 and 2

Appendix C – New Projects Added to the Initial Listing

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*				*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 06-07	*FY 07-08*	*FY 08-09*	*FY 09-10*		
Utilize data analysis/modeling to make better decisions							
5 – Participate in census address review In-house	Conduct meeting with LMD staff regarding response to 2010 Census		• Geocode digital address files from US Census • Identify valid addresses that city does not have recorded • Identify valid addresses that Census does not have recorded • Update city address data layer • Submit findings to census				High 1
6 – Standardize addresses county-wide with input from city/county /911; create routing layer county-wide In-house	Conduct meeting with Rowan County E-911 and other stakeholders	• Review addressing and street centerline data schema and field match	• Review current routing information to ensure it is correct • Complete routing information			Successful update of routing information for street centerline that is shared among all stakeholders	High 1
7 – Incident mapping (i.e., crime mapping) In-house	Conduct meeting with LMD and Police to review incident mapping needs	• Identify data currently available in police RMS that is needed for analysis by LMD	• Create models to auto-generate data layers regularly based on extractions of data from police system			Successful creation of traffic accident data layer and other data layers as identified by meetings conducted	High 2

Appendix C – New Projects Added to the Initial Listing

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*				*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 06-07	*FY 07-08*	*FY 08-09*	*FY 09-10*		
8 – Develop a county-wide water and sewer service plan In-house	Meet with LMD, SRU, Rowan County planning staff, and other stakeholders to determine scope of work and process		• Identify areas within Rowan County that are expected to be built out over next 20-50 years	• Identify major trunk lines for water and sewer services		Completed water and sewer service master plan	High 11
9 – Use network analysis for improved routing for public services $100,000	Conduct meeting with Public Services to review routing needs			• Purchase, install, and configure *RouteSmart* • Define routes for garbage and recycling collection, street sweeping, and utility meter reading	• Evaluate use of *RouteSmart* for transit routing	Successful implementation of *RouteSmart* and more efficient collection of garbage and recycling, street sweeping and utility meter collection	High 1 and 2

Provide necessary resources

10 – Wireless access city-wide	Meet with IT staff and other stakeholders	• Make existing wireless access points • Identify priority areas not presently served	• Support additional funding of wireless access points through IT			Wireless access is available city-wide … and all departments able to use it	High 1 an 3
11 – Support fire accreditation and standardization of coverage In-house	Meet with Fire staff	• Identify incomplete data layers needed for accreditation	• Complete identified data layers • Provide technical support for data analysis			Fire department maintains current accreditation and identifies future resources needed in order to provide excellent service	High 1 and 2

Appendix C – New Projects Added to the Initial Listing

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*				*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 06-07	*FY 07-08*	*FY 08-09*	*FY 09-10*		
12 – Develop on-line application to highlight economic development areas and urban progress zone In-house	Meet with LMD, SRU, Rowan EDC, and other stakeholders	• Identify data layers required and organization of on-line application • Fully document requirements and get go-ahead from stakeholders	• Develop on-line application • Test on-line application • Present completed project to city council • Prepare materials about on-line application for *Access16* and other advertising spots	• Conduct follow-up meeting with stakeholders • Identify additional data layers required and/or other functional requirements • Update on-line application, as needed		Public, on-line application that highlights areas available for economic development … economic development comes to Salisbury as a result	High 3

Implement GIS-based work order system

13 – Automatic notification to perform map updates within workflow Included in original work-order cost	Meet with GIS data editors and other stakeholders	• Identify instances which could trigger map changes • Build trigger into work order system that notifies appropriate GIS data editor(s)	• Identify additional instances which could trigger map changes as work order system is implemented throughout city	• Identify additional instances which could trigger map changes as work order system is implemented throughout city	• Identify additional instances which could trigger map changes as work order system is implemented throughout city	GIS editors notified each time feature (out in the field) is added, removed, or changed and requires modification in GIS	High 1
14 – Mobile access required Included in original work-order cost	Meet with GIS users and other stakeholders	• Identify users of work order system who need mobile access	• Update ArcGIS software to support mobile access			Users of work order system and GIS are able to perform all tasks on mobile data terminals	High 1

Appendix C – New Projects Added to the Initial Listing

Vision Component, Project Description, and Cost Estimate	*Launch Activity*	*Schedule of Activities*				*Victory Complete*	*Priority and Relationship to Council-level Outcomes*
		FY 06-07	*FY 07-08*	*FY 08-09*	*FY 09-10*		
15 – Produce end-of-year reports for performance measurement Included in original work-order cost	Meet with GIS users and other stakeholders	• Identify city staff who prepare end of year reports for performance measurement	• Identify work order system processes that *feed* end of year reports • Ensure collection of all necessary data for end-of-year reports	• Identify work order system processes that *feed* end-of-year reports as work order system is implemented throughout city	• Identify work order system processes that *feed* end-of-year reports as work order system is implemented throughout city	City staff are able to easily prepare end-of-year performance reports from work order system … and additional performance reports at any time throughout the year	High 1
16 – Pull up history of activity for address/parcel Included in original work-order cost	Meet with GIS users and other stakeholders	• Identify means by which GIS users and other stakeholders need to pull up history from work order system	• Provide input and feedback on retrieval of historic information from work order system	• Provide input and feedback on retrieval of historic information from work order system	• Provide input and feedback on retrieval of historic information from work order system	Users of work order system and GIS are able to pull up history of activity for address, parcel, or defined area from either the map or the database	High 1
17 – Start work order with either map or database – both equal Included in original work-order cost	Meet with GIS users and other stakeholders	• Receive letter of commitment from Cogsdale and ESRI Canada that bi-directional communication will be implemented with work order system	• Provide input and feedback on integration of work order system with GIS	• Provide input and feedback on integration of work order system with GIS	• Provide input and feedback on integration of work order system with GIS	Users of work order system and GIS are able to initiate work orders from either the map or from the database – and both are easy to perform	High 1

City of Salisbury

City Council Outcomes and Goals, FY 2006-07

(Revised on February 10, 2006 and Adopted March 21, 2006)

Outcome 1: Create a culture of excellent customer service within the city organization

1. Develop and implement a comprehensive customer service plan within the city organization – Human Resources

Outcome 2: Improve neighborhoods and safety for all areas of the city

1. Evaluate and implement an alarm ordinance – Police, Fire
2. Implement the Jersey City neighborhood plan – LM&D
3. Identify and initiate an *impact project* as part of the North Main Street Small Area Plan – LM&D, Public Services, Parks & Recreation

Outcome 3: Establish a creative enterprise economy with the best educated workforce, the most competitive infrastructure, an environment for creativity and innovation, a positive business climate, and supportive government in Salisbury and Rowan County

1. Prepare and implement a fiber-to-the-home business plan – Technology Services
2. Establish a unified community image which exemplifies our communities' cultural, educational, historic, environmental, entrepreneurial, and arts attributes – LM&D, Public Services
3. Partner with Rowan County Chamber of Commerce and Downtown Salisbury, Inc. to conduct focus groups to gather input on the quality of life amenities that are important to young professionals who work in Salisbury and Rowan County – City of Salisbury, Chamber of Commerce, Downtown Salisbury, Inc., - Administration, Human Resources
4. Implement the Business Incubator Plan as part of an overall economic development strategy for Salisbury and Rowan County – LM&D, CDC
5. Investigate entrepreneurial loan pool and funding options – City Manager, LM&D, selected Development Organizations, Financial Institutions
6. Participate with Rowan County in the development and implementation of a unified incentive plan to attract industry and business to Salisbury and Rowan County – Management Services, Administration
7. Support Rowan County in the promotion and development of the Rowan County airport – City Council, Administration
8. Explore the creation of an airport development zone – City Council, Administration
9. Partner with Rowan Jobs Initiative – LM&D, EDC, Committee of 100

Outcome 4: Provide quality parks and recreation services

1. Complete master plans for individual parks – Parks & Rec

Outcome 5: Implement *Salisbury Vision 2020 Plan*

1. Consider adoption of the City of Salisbury Land Development Ordinance – City Council
2. Prepare East Innes Street streetscape plan – LM&D

Outcome 6: Attract, retain and develop high quality city employees

1. Implement strategies to recruit employees from diverse populations – Management Team, Human Resources
2. Develop strategies to attract and retain quality employees – Human Resources
3. Implement employee training and development plan – Human Resources

Outcome 7: Partner with Rowan-Salisbury Schools

1. Meet with school officials to determine needs with which the city can assist – City Council, Management Team

Outcome 8: Improve overall strategic management of City and departments

1. Incorporate the *Good to Great* concepts into the city's culture as a foundation for Salisbury becoming a *high performance organization* including the successful completion of all strategic plans – City Manager, Management Team, Human Resources, City Employees

Outcome 9: Improve and enhance Downtown Salisbury

1. Implement the Downtown Salisbury Master Plan – LM&D
2. Conduct a downtown ADA compliance audit – LM&D, Human Resources, Public Services

Outcome 10: Streamline development review process and ordinances

1. Review construction standards – LM&D, Utilities
2. Seek local permitting authority for utility extensions – Utilities, LM&D
3. Salisbury-Rowan Utilities to update and enforce existing state-mandated plans and programs (necessary to achieve local permit authority) – Utilities, LM&D
4. Develop a communication plan for sharing development processes and ordinances with stakeholders – City Council, City Manager, LM&D, Utilities

Outcome 11: Provide quality water and wastewater services to Rowan County that protect the environment, promote public health, improve the quality of life, support planned growth, and maintain public trust

1. Partner with Rowan County to implement the Town Creek/I-85 growth corridor interceptor sewer extension project – Utilities
2. Safeguard Salisbury's interests on the Yadkin River by participating in Federal Energy Regulatory Commission (FERC) re-licensing of Alcoa's Yadkin

Project – Utilities, City Council, Administration

3. Obtain renewal of the City of Salisbury's National Pollutant Discharge Elimination System (NPDES) discharge permit – Utilities
4. Fund, design, construct, and complete first phase of Wastewater Facilities Capital Improvements Project – Utilities

Notes

(For more information … visit *gis.salisburync.gov*)

Project Management
Strategic Planning • Neighborhood Planning
Future Search • Visioning
Mission Statement • Board Facilitation
Needs Assessment • Planning Studies
Citizen Planner Training • Permit Tracking
Group Facilitation Training

Garry V. Cooper Associates

Dr. Garry V. Cooper, AICP
127 Sports Club Lane, #132
Boone, NC 28607

Telephone: 828.262.7051 (work) • 828.264.0708 (home)
Fax: 828.262.3067
E-mail: garry@cooperwww.com
www.cooperwww.com